

In the Specification

Please amend the Specification as follows:

[0007] A microsystem according to the invention is in particular adapted to create field barriers in the microsystem along predetermined reference surfaces, said field barriers extending at least partly across ~~beyond~~ the width of a channel in the microsystem, and comprising predetermined curvatures relative to the longitudinal extension of the channel, to the direction of flow of the suspension liquid in the channel or to the direction of movement of the (non-deflected) particles. In this context the term "reference surface" not only describes a two-dimensional formation but also a spatial region to which the field effect of the respective microelectrodes extends and in which the field barrier for dielectric influencing of the microscopic particles in the microsystem is formed. This spatial region essentially corresponds to a region through which the field lines of the effective microelectrodes pass; in the case of microelectrode pairs acting in combination, said spatial region essentially passes as a curved hypersurface between the microelectrodes, while in the case of individually acting microelectrodes it acts as a hypersurface encompassing the field line distribution of the individually acting microelectrode. Reference surfaces define the locations where polarisation forces in the microscopic particles can effectively be generated. The microelectrodes are designed such that the reference surfaces, depending on the desired function of the respective micro electrodes, have a predetermined curvature in relation to the direction of movement of the particles in the microsystem, so that an optimal combined effect of the polarisation forces and of the mechanical forces is achieved. Therefore the field barriers are also referred to as functional field barriers. The term "curvature" used here does not refer to the curvature of field lines on

straight microelectrodes as a result of the field lines exiting into the adjacent space. But rather, "curvature" refers to the shape of the field barriers formed on microelectrodes.